



Gladman Developments Ltd

Land East of Pirton

Phase 1 Desk Study

340628-R01(01)

RSK GENERAL NOTES

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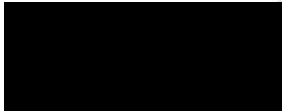
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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

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EXECUTIVE SUMMARY

Commissioning and purpose of assessment	RSK Environment Limited (RSK) was commissioned by Gladman Developments Ltd to carry out a Phase 1 Desk Study of the land east of Pirton, with national grid coordinates 515263, 231888. The overall aim of the project was to assess land contamination sources and geotechnical constraints to the development of the site.
DESK-BASED ASSESSMENT	
Site description and proposed development	The site currently comprises an access road (Drovers Way) and an agricultural field surrounded by hedgerows. The site occupies an area of 6.65 hectares and is being considered for development for residential use.
History of site and surrounding area	The main land parcel has always been under agricultural use, with the land currently the access road also only being agricultural land before being developed into a residential area. The potential risk associated with the use of pesticides at the site is considered to be low. Electrical substations, historic sewage works and tanks have been identified as potentially contaminative activities in the surrounding area.
Previous site investigation (SI) reports	There are no previous SI reports available
Geology and environmental setting	The site is underlain by agricultural topsoil over Lowestoft Formation with the West Melbury Marly Chalk Formation underlying it according to published geological data. There is also likely to be made ground associated with the access road area of the site. Environmental receptors identified comprise: • Groundwater within Lowestoft Formation Classified as a secondary aquifer • Groundwater within West Melbury Marly Chalk Formation is classified as a principal aquifer • No groundwater or surface water abstractions are located within 1000 m of the site.
Site reconnaissance findings	The key findings of the site reconnaissance are as follows: • The site consists of an agricultural field – grassland • Two surface water features were identified: a ditch onsite within the southern boundary and a pond 5m southwest • There where overhead electrical cables adjacent south of the site • There are residential properties to the west and north of the site • The land use to south and east of the site is agricultural use • No contamination activities or waste were identified onsite

Geotechnical constraints assessment	The key findings of the geotechnical assessment are as follows: • Due to the presence of possible shrinkable soils related to the Lowestoft formation, foundations may need to be designed taking into account all the normal precautions, including minimum depths, to minimise the risk of future foundation movements in accordance with NHBC Standards, or similar. • The site is underlain by chalk strata. Based on the Edmund's risk assessment model for natural dissolution features referred to in CIRIA Report C574 (Lord et al. 2002), the site falls into the 'moderately low anticipated subsidence risk' category. • There may be sudden lateral changes in ground conditions due to the presence of Lowestoft Formation over a portion of the site.
Initial conceptual site model (CSM) and preliminary risk assessment (PRA)	There are no potentially complete contaminant linkages with a potential risk of moderate to low or higher identified for the site. However, further assessment, particularly related to the ground gas, would be required to confirm the potential low risk associated with the site. Uncertainties and data gaps have been identified in the CSM at desk study stage and should be considered in the design of future intrusive investigation if proposed.
Recommendations including issues for further assessment	The following recommendations are made for further assessment of the site to address remaining uncertainties: • An intrusive investigation to confirm: ○ Geological succession beneath the site and to provide geotechnical data. ○ To confirm the contaminative and ground gas status of the sites and confirm potentially complete pollutant linkages aren't present on site.
<i>The information given in this summary is necessarily incomplete and is provided for initial briefing purposes only. The summary must not be used as a substitute for the full text of the report.</i>	

1 INTRODUCTION

1.1 Commissioning

RSK Environment Limited (RSK) were engaged by Gladman Developments Ltd (Gladman House, Alexandria Way, Congleton, CW12 1LB). herein referred to as the 'Client' to carry out a Phase 1 Desk Study at the land east of Pirton, Hitchin, SG5 3QU (hereafter referred to as 'the site').

The works were undertaken by means of fee proposal reference 340628 T01(00) submitted on 22 January 2025, which forms the appointment between ourselves and the Client.

References in this report to 'we', 'us', or 'our' shall mean RSK Geosciences as a trading name of RSK Environment Limited (company no.SC115530) at registered address 65 Sussex Street, Glasgow, G41 1DX.

The site location is provided in **Figure 1** and the site layout boundary to which this report refers is presented in **Figure 2**.

The report should be read and used in accordance with the limitations and constraints identified in the report text, and at **Appendix A – Service Constraints**.

1.2 Objectives

The site is being considered for development for residential use.

The objective of the work is:

- to identify and contamination and/or geotechnical constraints to the proposed development and, where relevant, to support discharge of planning conditions and building control requirements
- to identify based on risk assessment whether additional investigation or remediation works may be required to support safe development to make the site suitable for use
- to evaluate potential client environment liabilities associated with site ownership

1.3 Scope of works

The scope of works has been developed in accordance with relevant British Standards and authoritative technical guidance as referenced through the report. The assessment of the contamination status of the site is in line with the technical approach presented in Land Contamination Risk Management (LCRM) (Environment Agency, 2023) and in general accordance with BS 10175: 2011 + A2 2017 (BSI, 2017). It is also compliant with relevant planning policy and guidance (i.e. National Planning Policy Framework).

The scope of works for the assessment has included the following:

Desk study:

- review of the history of development on the site and surroundings
- assessment of local geology, hydrogeology and hydrology
- consider potential risks from coal mining activities

- consider relevant information provided by the local planning authority
- review previous reports pertaining to the site condition where available
- completion of a site reconnaissance survey to assess the visual condition of the site
- development of an initial conceptual site model (CSM) and preliminary risk assessment
- preliminary consideration of geotechnical constraints and hazards
- provide recommendations for further works should this be required.

1.4 Existing reports

No existing reports relevant to the site assessment have been provided to RSK.

1.5 Limitations

This report is subject to the RSK service constraints given in **Appendix A** and limitations that may be described below and throughout this document.

This report was prepared in accordance with good practice guidance at the time of issue. Consideration should be considered in the light of changes in legislation, statutory requirements, or industry practices subsequent to the date of issue.

The opinions expressed in this report, and the comments and recommendations given, are based on the information obtained from the desk assessment and the site reconnaissance survey. No intrusive investigations have been undertaken to confirm the actual ground conditions and hence the environmental status of the site.

The study aims to principally identify and assess the potential risks and liabilities associated with contamination of the ground, on and in the vicinity of the site. While this includes consideration of current operations and housekeeping on the site, the report does not constitute a comprehensive environmental audit of the site, as covered under ISO 14001.

A detailed survey of invasive plant species is outside the scope of this investigation therefore detailed comments with regards to such species have been omitted from this report.

2 SITE DETAILS

2.1 Site location

Site location details are presented in **Table 1** and a site location plan is provided on **Figure 1**.

Table 1 Site location details

Site name	Land East of Pirton
Full site address and Post code	Holwell Road, Pirton, SG5 3QU
National Grid coordinates (centre of site)	515263, 231888

2.2 Site description

The site boundary and current site layout are shown on **Figure 2**. The site covers an area of c. 6.65 hectares. The site is currently an agricultural land with an access road (Drovers Way).

The site is largely rectangular in shape with an access road (Drovers Way) from the western boundary heading northwards towards Holwell Road.

2.3 Surrounding land uses

The site is located in Pirton, within a predominantly residential and agricultural setting. Immediate surrounding land uses are described in **Table 2**.

Table 2 Surrounding land uses

North	Adjacent to the north of the site is a large residential property (Northmead) along Holwell Road with a large garden. The land beyond this property is agricultural farmland
East	The land use to the east is agricultural farmland
South	The land use to the south is agricultural farmland
West	To the west is residential properties and associated gardens

2.4 Proposed development plans

Based on the information provided by the client, RSK have understood that the proposed development is likely to include up to 130 dwellings with associated infrastructure.

No details of the proposed ground levels have been provided therefore for the purpose of this report it has been assumed that the current levels will remain unchanged.

Section 3.3.1 summarised the active planning applications pertaining to the site, as listed in the planning portal in the North Hertfordshire District Council.

3 DESK-BASED ASSESSMENT

The desk-based assessment was designed to generally meet the objectives of a preliminary or Phase 1 investigation, as defined by BS 10175:2011+A2:2017 (BSI, 2017) and BS 5930:2015, and is set in context of a Tier 1 preliminary risk assessment as defined in LCRM.

The "vicinity" of the site for the purposes of this report is defined as locations situated within an approximate 250 m radius of the site, although certain sources and/ or sensitive targets further than 250 m distance from the site may also have been considered.

3.1 Site history

3.1.1 Historical development record

The development history of the site and surrounding area based upon assessment of historical plans and records is detailed in **Table 3** and **Table 4** respectively.

The historical maps reviewed are shown within the environmental database report in **Appendix B**.

Table 3 Summary of historical development on site

Date from	Date to	Historical Land Use (on-site)	Area of site
1881	1979	The site is arable agricultural farmland split across seven field parcels including field boundary and hedgerows	Entire site
1979	2015	The site appears to have been made into one large arable field	Entire site
2020 (2015 aerial photography from GroundSure does not show development)	Time of writing February 2025	Site access road has been constructed in conjunction with other residential properties	West of the site
2010	Time of writing February 2025	The main land parcel is still in arable farmland use	Main land parcel

Table 4 Summary of historical development in the vicinity of the site

Date from	Date to	Historical Land Use (off-site)	Distance (m) and orientation
1881	Time of writing	Hambridge way (track)	Adjacent to the south of the site
1881	Time of writing	Holwell Lane/West Lane	Adjacent to the northeast

Date from	Date to	Historical Land Use (off-site)	Distance (m) and orientation
1881	Time of writing	Arable farmland	5 m south
1881	Time of writing	Arable farmland	Adjacent to the east
1881	Time of writing	Arable farmland	Adjacent to the north
1881	Time of writing	Residential properties with associated gardens	100 m to west in 1882 to adjacent present day
1881	1993	Littlegreen Farm	100 to 250 m west
1881	1947	Shoulder Of Mutton (Public house/beer house)	100 m west from the southwest corner of the site
1881	1898	Allotment gardens	50 m west (northern half of the site)
1881	1970	Chalk pit earth works (first listed as old chalk pit in 1899 map)	700 m northwest
1881	2022 (Google Earth© satellite images)	Allotment gardens becoming smaller over time	250 m southwest
1898	1901	Well (land plot 173)	75 m west
1898	1901	Two wells (land plot 105)	150 m west
1898	1901	Well (land plot 706)	125 m west
1898	1901	Well (land plot 891)	175 m west
1922	1948	Rural District Council Sewage Tank	224 m northwest
1922	1948	Council pumping station for the sewage tank	200 m west
1979	1993	Electrical substation	70 m west
1979	1993	Elm tree farm	125 m west
1947 (1979)	Time of writing	Northmead (large residential property)	Adjacent to the north of site
1981	Time of writing	Playing field and playground with pavilion (in area of allotment gardens) getting bigger over time	250 m southwest

Considering the agricultural use of the site from circa 1881 to present day (2025), pesticides may have been used at the site. It is also considered that the potential for on-site storage of chemicals such as pesticides (potential point sources) is unlikely.

It is considered that recent and current use of pesticides will have been subject to statutory control regarding the product used, their active chemical constituents and their application to land or vegetation. Highly persistent forms are now relatively rare. Historic use of pesticides has potentially occurred at the site, but the extent of potential diffuse historic use is not known, with no clearly identifiable point source on the site. Therefore, the potential risk associated with the use of pesticides at the site is considered to be low and no further consideration was given in the development of CSM and risk assessment.

The key potential contaminative land uses identified from the available historical maps include:

- Electrical substation 70 m west
- Historic Council Pumping station for the sewage tank 200 m west
- Historic Rural District Council Sewage Tank 224 m northwest

3.1.2 Unexploded ordnance

A review of publicly available unexploded ordnance (UXO) risk maps indicates that the site is located in an area with low potential for wartime bombs to be present (Zetica, 2025). A copy of the risk map is presented in **Appendix C**.

3.2 Information from environmental database report

Relevant environmental permits and incidents detailed within the environmental database report (see **Appendix B**) are summarised below in **Table 5**.

Table 5 Summary of environmental permits, landfills and incidents

Data type	Entries on-site	Entries <250 m from site	Entries >250 m from site of relevance	Details
Agency and hydrological				
Environmental permits – incorporating Environmental Permitting Regulations (EPR) and/ or Pollution Prevention and Control (PPC) permits; former Integrated Pollution Controls (IPC), Local Authority Pollution Control (LAPC)	0	0	0	N/A
Enforcement and prohibition notices	0	0	0	N/A

Data type	Entries on-site	Entries <250 m from site	Entries >250 m from site of relevance	Details
Pollution incidents to controlled waters, prosecutions relating to controlled waters, substantiated pollution incident register, Water Industry Act referrals	0	0	0	N/A
Discharge consents	0	0	1	The environment database report has evidence of one historic discharge consent for Walnut Tree Farm, located 464 m southwest of the site for unspecified effluent. Permit number PR1NFG0514 (revocation date 20/02/1991)
Registered radioactive substances	0	0	0	N/A
Landfill and waste				
Active landfills	0	0	0	N/A
Historic/closed landfills	0	0	0	N/A
Other waste management licences	0	0	0	N/A
Potentially in-filled land (pit, quarry, pond, marsh, river, stream, dock etc)	0	0	0	N/A
Hazardous substances/industrial land uses				
Control of Major Accident Hazards (COMAH) sites	0	0	0	N/A
Explosives sites, Notification of Installations Handling Hazardous Substances (NIHHS), Planning hazardous substance consents/enforcements	0	0	0	N/A
Contaminated land Part 2A register entries and notices	0	0	0	N/A
Fuel station entries	0	0	0	N/A

Data type	Entries on-site	Entries <250 m from site	Entries >250 m from site of relevance	Details
<i>Note: Entries have only been included within the table where they are located within a 250 m radius of the site or, where they fall outside of this radius but are considered to comprise a significant entry.</i>				

3.2.1 Contemporary trade directory entries

Active potentially contaminative land uses identified in the contemporary trade directory and with potential to affect the site are identified as two electrical substations (71 m west and 112 m west).

3.3 Information from regulatory authorities

3.3.1 Planning records

Planning records held by the Local Authority Planning Department pertaining to the site and relevant to the current assessment are summarised in **Table 6**.

Table 6 Planning information

Year	Details and application reference no.	Part of site
June 2017	Ref No. 17/01543/1 Outline planning application for the erection of up to 99 dwellings with public open space, landscaping and sustainable drainage system (SuDS) and vehicular access point from Holwell Road. All matters reserved except for means of access. Planning refused September 2017	Entire site
October 2017	Ref No. 17/02563/1 Outline planning application for the erection of up to 85 dwellings with public open space, landscaping and sustainable drainage system (SuDS) and vehicular access point from Holwell Road. All matters reserved except for means of access. Planning refused December 2017	Entire site

3.3.2 Site services

Obtaining a full set of service plans was outside the scope of this report. Services identified on-site during the walkover are detailed in Section 4.

Buried utility services and their backfill can represent a constraint to development and act as preferential migration pathways for gas, vapour or groundwater towards a receptor.

3.4 Site geology

3.4.1 Anticipated geological sequence

Published records (British Geological Survey, 1995) for the area and available historical borehole logs indicate the geology of the site to be characterised by the succession recorded in **Table 7**.

There is one publicly available BGS historical borehole located within 250 m of the site located 160 m northwest which is presented in **Appendix C** however, this only shows water level dips from 1956 to 1957 not the geological sequence.

There is one publicly available BGS historical boreholes located approximately 500 m northwest of the site that shows the stratum description, which is presented in **Appendix C**.

Table 7 Site geology

Strata	Description	Estimated thickness	Permeability
Agricultural topsoil	Variable likely clay	Unknown	Variable
Lowestoft Formation - Diamicton (only indicated in south of the site). No records of superficial deposits beneath the rest of the area.	chalky till, with outwash sands and gravels, silts and clays. The till is characterised by its chalk and flint content.	Variable	Variable depending on sand and silt content
West Melbury Marly Chalk Formation	Buff, grey and off-white, soft, marly chalk and hard grey limestone	Regional 15-25 m	High to very high
Relevant information sources: BGS Geoindex ☒ BGS borehole logs ☒ Previous SI reports ☐			

With reference to the historical data other than the access road to the site there has not been any phases of development onsite. The made ground is likely to be present beneath the access road area.

3.4.2 Radon

The environmental database report provides an assessment of site-specific radon risk. The report indicates that the estimated percentage of houses with radon above the Radon Action Level (200 Bq m⁻³) is <1%.

The environmental database report, therefore, indicates that the site is not located within an 'Affected Area' and therefore no radon protective measures are required within new dwellings (or extensions) at the site.

3.5 Mining and quarrying

Evidence has been sought to identify any mining, quarrying, landfilling and land reclamation operations, past and present, which have taken place within 500 m of the site. An initial site appraisal has been carried out based on the information provided on the Coal Authority Interactive

Viewer of the UK Coalfield areas and the commercial environmental databased report for information on non-coal mining.

Use of the Coal Authority interactive viewer indicates the site lies outside their Coal Mining Reporting Area and therefore no further assessment of coal mining issues is required within this report.

3.5.1 Areas of other (rock or mineral) mining

The site lies in an area with a known history of quarrying/mining of Chalk.

Where Chalk deposits are present at surface, historical mining activities may have resulted in unrecorded mines.

Consideration should also be given to sites in areas where soluble bedrock is present. This would include for example areas over limestone, Chalk, evaporites, halite, saliferous and gypsiferous beds. In these areas natural solution features may be present and this should be considered when designing any site investigation works.

There is no know record of mining of the chalk onsite or within 500 m of the site.

3.6 Hydrogeology

A summary of the hydrogeological setting of the site, with respect to the anticipated geological sequence set out in Section 3.4 is presented below in **Table 8**.

Table 8 Summary of hydrogeological setting

Condition	Description
Aquifer characteristics	The site is underlain by a secondary undifferentiated aquifer relating to the superficial geology within the Lowestoft formation. The site is underlain by a principal aquifer relating to the bedrock geology within the West Melbury Marly Chalk Formation. The site lies within the Upper Bedford Ouse Chalk groundwater body catchment ID GB40601G603000 which has an overall rating of poor (2019) The presence of low permeability clay at relatively shallow depths beneath the site, while restricting downwards migration, may increase the potential for lateral migration of shallow groundwater (and therefore mobile contamination, if present).
Depth to groundwater and flow	Shallow groundwater in the site area is assumed to flow in a northwest direction, i.e. towards and in the direction of flow of the Standon brook or southern direction towards the ditch that is located adjacent to the south of the site. BGS Hydrogeological Map (ref: Sheet 14 : Hydrogeological Map of the Area Between Cambridge and Maidenhead (1:100,000) – 1984) indicates that the piezometric surface of the Chalk aquifer is anticipated to be at approximately 50.00 metres Above Ordnance Datum (mAOD) (c. 15.00 to 20.00 metres below ground level (mbgl)). The regional direction of groundwater flow, as shown in the hydrogeological map, within the chalk aquifer is to the northeast.
Groundwater recharge/attenuation	Most of the site is currently unsurfaced and will therefore drain to ground.

Condition	Description
Historical implications for hydrogeology	No historic implication of hydrology has been identified
Licensed groundwater abstractions	The environmental database report indicates that there are no groundwater abstractions within a 1km radius of the site. The closest active abstraction is 1930 m south with license number 6/33/13/*G/0011, owned by Affinity Water Limited for potable water supply
Source protection zones	Information available in the GroundSure report indicates that the site does not lie within a currently designated groundwater Source Protection Zone (SPZ).
Ground source potential	As part of RSK's commitment to promote sustainability in all that we do, we have assessed the site to determine the potential for space heating and/or cooling and hot water to be supplied by sustainable ground source heat pumps (GSHP). According to the BGS and EA online open loop GSHP screening tool for England and Wales the aquifer beneath the site is favourable. The geology beneath the site has potential for providing space heating and hot water via closed loop ground source heat pumps.

3.7 Hydrology

A summary of the hydrology within the site area is summarised in **Table 9**.

Table 9 Summary of hydrology in site area

Condition	Description
Surface watercourses/features	The environmental data base report identifies there is a surface water course on site related to an Inland river not influenced by normal tidal action it is within the southern site boundary. The site lies within the Standon Brook surface water catchment. Catchment ID GB105033037710 which has an overall moderate ecological status (2022) The ditch (Inland river) that is located adjacent to the south of the site at the time of the walkover was dry with areas of water pooling but no flow identified. The channel is approximately 0.50 m deep and 1.00 m wide
Surface water abstractions	There are no surface water abstractions identified by the environmental database, within a 1km radius of the site.
Site drainage	The access road contain surface water drains that enter the road sewer network. The rest of the site is not hardstanding and drains straight to ground.
Preliminary flood risk assessment	The indicative floodplain map for the area, shows that the site lies within flood zone 1. Lands within flood zone 1 have a low probability of flooding from rivers and the sea. A copy of the risk map is presented in Appendix C The environmental data base reports the risk onsite from surface water flooding is negligible (data is sourced from Ambiental Risk Analytic), With the risk from groundwater flooding being moderate to moderate high for a 1 in 100 year event (data is sourced from Ambiental Risk Analytic) A flood risk assessment (FRA) is outside the scope of this report.

3.8 Sensitive land uses

Table 10 provides a summary of any environmentally sensitive areas identified within 250 m of the site based on the environmental database report.

Table 10 Environmentally sensitive areas

Feature	Present within 250 m of site?	Details	Likely pathways from site?
International designations – Ramsar wetland, Special Area of Conservation (SAC), Special Protection Area (SPA)	No	N/A	N/A
National designations – Site of Special Scientific Interest (SSSI), National Nature Reserve (NNR), ancient woodland	No	N/A	N/A
Local designations – Local Nature Reserve, Site of Importance for Nature Conservation (SINC)	No	N/A	N/A
Nearest high sensitivity development, e.g. residential	Yes	Adjacent Residential properties to the north and west of site	Yes - dust, noise and track out from site works access road as is within the development

3.9 Climate change

Planning policies place a requirement on developers to mitigate and adapt to future climate change.

LCRM (EA, 2023) requires land contamination assessments to '*factor in climate change impacts, including extreme weather events, to ensure site works and any long term remediation is sustainably robust*', this includes consideration in the CSM and potential contaminant linkages that may be affected and the related uncertainty.

The effects of climate change on the conceptual site model and the potential for climate change effects to improve or exacerbate site conditions with respect to potential contaminant linkages is uncertain. Effects identified in LCRM could include increased rainfall and extreme weather events (i.e. flood and storms), increased seasonal variations in groundwater levels, soil moisture content, and potential for mobilisation of contaminants.

RSK consider that sites that are likely to be more susceptible to climate change effects to be those located on or near to the coast and at risk of coastal flooding, or erosion and those located within the flood plain.

Qualitative consideration of climate change is provided for specific linkages in the qualitative risk assessment and in the assessment of uncertainty.

4 SITE RECONNAISSANCE FINDINGS

A site reconnaissance survey was completed on 17 February 2025 by RSK.

The key findings from the site reconnaissance survey were as follows:

- The site consists of an agricultural field – grassland
- Two surface water features were identified: a ditch onsite within the southern boundary and a pond 5 m southwest
- There were overhead electrical cables adjacent south of the site
- There are residential properties to the west and north of the site
- The land use to south and east of the site is agricultural use
- No contamination activities or waste were identified onsite

It should be noted that the site reconnaissance survey was subject to limitations that included:

- The site was visited in February during the period of dormancy and vegetation die back

A site plan is provided in **Figure 2** and photographic records are included in **Appendix D**.

The notes recorded during the reconnaissance survey are provided in **Appendix E**.

5 PRELIMINARY GEOTECHNICAL CONSTRAINTS

5.1 Design class

BS EN 1997-1 defines three different Geotechnical Categories that structures may fall into, which are summarised as follows:

- Category 1: Small and relatively simple structures for which it is possible to ensure that the fundamental requirements will be satisfied on the basis of experience and qualitative geotechnical investigations; with negligible risk
- Category 2: Conventional types of structure and foundation with no exceptional risk or difficult ground or loading conditions
- Category 3: Structures or part of structures, which fall outside limits of Geotechnical Categories 1 and 2. Examples include very large or unusual structures; structures involving abnormal risks, or unusual or exceptionally difficult ground or loading conditions; structures in highly seismic areas; structures in areas of probable site instability or persistent ground movements that require separate investigation or special measures.

Based on the information provided above on the proposed development and in view of the anticipated ground conditions, a Geotechnical Category of Category 2 has been assumed for the purposes of designing the geotechnical investigation. This should be reviewed at all stages of the investigation and revised where necessary.

5.2 Preliminary geotechnical hazards assessment

A summary of commonly occurring geotechnical hazards associated with the anticipated geology outlined in Section 3.4 above is given in **Table 11** together with an assessment of whether the site may be affected by each of the stated hazards.

Table 11 Summary of preliminary geotechnical risks that may affect site

Hazard category	Hazard status based on desk study findings and proposed development		Engineering considerations if hazard affects site
	Could be present and/or affect site	Unlikely to be present and/or affect site	
Sudden lateral changes in ground conditions	☒	☐	Geology maps show the site to be on a superficial boundary and therefore ground condition across site may vary Likely to affect ground engineering and foundation design and construction
Shrinkable clay soils ¹⁾	☒	☐	Area of site with Lowestoft Formation could be shrinkable clay soils. Design

Hazard category	Hazard status based on desk study findings and proposed development		Engineering considerations if hazard affects site
	Could be present and/or affect site	Unlikely to be present and/or affect site	
			to NHBC Standards Chapter 4 or similar
Highly compressible and low bearing capacity soils, (including peat and soft clay)	☐	☒	N/a
Silt-rich soils susceptible to rapid loss of strength in wet conditions ¹⁾	☐	☒	N/a
Running sand at and below water table	☐	☒	N/a
Karstic dissolution features (including 'swallow holes' in Chalk terrain) ¹⁾	☒	☒	May affect ground engineering and foundation design and construction – refer to Section 5.2.1.
Evaporite dissolution features and/or subsidence ¹⁾	☐	☒	N/a
Ground subject to or at risk from landslides ¹⁾	☐	☒	N/a
Ground subject to peri-glacial valley cambering with gulls possibly present	☒	☐	Glacial deposits form over part of the site it is possible that this could affect the site - Likely to affect ground engineering and foundation design and construction
Ground subject to or at risk from coastal or river erosion ¹⁾	☐	☒	N/A
High groundwater table (including waterlogged ground) ¹⁾	☐	☒	N/A
Rising groundwater table due to diminishing abstraction in urban areas ¹⁾	☐	☒	N/A
Geological faults, fissures and break lines	☐	☒	N/A
Underground mining including shafts and adits (e.g. coal, mineral)	☐	☒	N/A
Effects of extreme temperature (e.g. cold stores or brick kilns/furnaces)	☐	☒	N/A
Existing sub-structures (e.g. tunnels, foundations,	☐	☒	N/A

Hazard category	Hazard status based on desk study findings and proposed development		Engineering considerations if hazard affects site
	Could be present and/or affect site	Unlikely to be present and/or affect site	
basements, and adjacent sub-structures)			
Filled and made ground (including embankments, infilled ponds and quarries)	☐	☒	N/A
Adverse ground chemistry (including expansive slags and weathering of sulphides to sulphates)	☐	☒	N/A
Site topography, including presence of steep slopes	☐	☒	N/A
Note: Seismicity is not included in the above table as this is not normally a design consideration in the UK. ¹⁾ The potential for these geohazards to impact the site may be exacerbated by climate change related fluctuations in temperature and precipitation.			

5.2.1 Chalk

In view of the prevailing ground conditions, with Chalk at shallow depth beneath the site, it is normal practice to consider the potential risk of ground subsidence related to the presence of swallow holes and other natural chalk solution features or man-made cavities.

Based on the Edmund's risk assessment model for natural dissolution features referred to in CIRIA Report C574 (Lord et al. 2002), the site falls into the 'moderately low anticipated subsidence risk' category. With reference to Edmund's database of known natural and man-made chalk solution features there are no such features in the immediate vicinity of the site. with the closest located 4994 m away.

5.2.2 Clay shrink-swell

One of the likely geotechnical implications resulting from climate change impacts is that longer hotter summers will increase the zone of seasonal moisture variation in the upper soil horizon, leading to additional shrinkage. Furthermore, warmer wetter winters can cause rebound of soil moisture levels, leading to swelling. These changes will likely give rise to increases in subsidence and heave issues and hence insurance claims for existing buildings. The effects can also be exacerbated where building near trees resulting in desiccation (NHBC Standards Chapter, 2024). This and other potential climate change-related impacts are considered in NHBC report NF93 – Foundation solutions: future proofing against climate change (NHBC, 2023a).

The BGS GeoClimate UKCP18 study (BGS, 2023) considers the potential influence of climate change on the probability of subsidence. These BGS GeoClimate shrink–swell national datasets were developed by combining long-term UKCP scenarios for rainfall and temperature changes with

the geotechnical properties of the ground, so as to identify areas projected to experience the largest increases in susceptibility to shrink-swell subsidence. The GeoClimate UKCP18 Open data is provided for two time periods, the 2030s and the 2070s with one projection provided for each time period, based on the average outcome for the UKCP18 higher emissions scenario and the most susceptible value (i.e. worst case) within the GeoSure grid cell.

This data is available on BGS Geoindex and the 2070 layer has been consulted for the proposed development at this site. This indicates that it is probable that foundations will be affected by increased clay shrink-swell due to climate change' based on GeoClimateUKCP18.

The NHBC NF93 report (NHBC Foundation, 2023a) identified that foundations for new domestic structures should be designed to accommodate climate change resilience for the entire lifetime of a building.

6 INITIAL CONCEPTUAL SITE MODEL

In the UK land contamination is assessed using a risk-based approach taking account of the magnitude (severity of the hazard) and likelihood (probability) of occurrence. A 'receptor' is something that could be adversely affected by contamination (e.g. people, an ecological system, property or a water body). A 'pathway' is a route or means by which a receptor is or could be exposed to or affected by a contaminant. A 'contaminant source' is a hazard but it can only pose a risk to a receptor where a pathway is present.

The relationship between sources, pathways and receptors are referred to as a conceptual site model. A risk can only be realised where a contaminant source, pathway and receptor are all in place, referred to as a 'contaminant linkage'.

In line with LCRM (Environment Agency, 2023) and BS 10175: 2011 + A2 2017 (BSI, 2017), RSK has used information in the preceding sections to identify hazards (sources of contaminants), receptors that may be impacted and plausible linking pathways. Where all three are present this is termed a potentially complete contaminant linkage and a qualitative risk estimation is made.

The conceptual site model has been considered in context of the proposed development as understood at the time of writing this report. Should the site development proposals change, the CSM and the associated contaminant linkages identified may need to be revised.

6.1 Potential soil, soil vapour and groundwater linkages

6.1.1 Potential sources of contamination

Potential sources of soil and groundwater contamination identified from current activities and the history of the site and surrounding area are presented in **Table 12**.

Table 12 Potential sources of soil and groundwater contamination

Potential sources	Contaminants of concern
On-site	
Made ground (i.e. fill material) under access road (this is unlikely to be contaminated as built and developed in last 10 years)	Unknown fill material but potentially including brick, ash and clinker and containing toxic and phytotoxic metals, inorganics, polycyclic aromatic hydrocarbons (PAHs), asbestos
Off-site	
Electrical substation (historical and current) 70 to 71 m west and 112 m west	Polychlorinated biphenyls (PCBs), heavy metals, asbestos, oils, arsenic and cadmium
Historic Council Pumping station for the sewage tank 200 m west (1922-1948)	Petroleum hydrocarbons, fuel additives, PAHs, chlorinated solvents, volatile organic compounds e.g. BTEX, semi-volatile organic compounds (SVOCs) e.g. phenols, asbestos, sewage sludge
Historic Rural District Council Sewage Tank 224 m northwest (1922-1948)	Chlorinated solvents, cleaning chemical, volatile organic compounds e.g. BTEX, semi-volatile organic compounds (SVOCs) e.g. phenols, asbestos, sewage sludge

6.1.2 Sensitive receptors

Sensitive receptors identified at or in the vicinity of the site that could be affected by the potential sources identified above comprise:

- future site users (residential)
- adjacent site users (residential)
- future buildings and services (i.e. foundations and potable water pipes)
- groundwater in principal aquifer associated with the West Melbury Marly Chalk Formation
- surface water course (within sites southern boundary)

Considering the potential sensitivity and resource value, the Secondary Undifferentiated aquifer is not considered as a receptor. However, the potential migration through the secondary undifferentiated aquifer into the surface water course is considered as a pathway.

6.1.3 Potential contaminant pathways

Exposure pathways applicable to human health receptors include:

- direct ingestion, inhalation, oral and dermal contact with soil/made ground and soil-derived dust and consumption of site-grown produce
- vapour migration followed by indoor and/or outdoor inhalation
- soil-derived dust migration followed by off-site deposition and ingestion, inhalation, and dermal contact
- asbestos fibre release followed by inhalation
- wind-blown dust and deposition off-site followed by direct ingestion, inhalation, and dermal contact.

Pathways applicable to environmental pathways include:

- direct contact of foundations/services with contamination in soil and/or groundwater
- leaching from soil followed by migration in groundwater
- migration in groundwater
- migration via run-off through drainage
- discharge(runoff) to surface water

Ecological receptors are only considered within the conceptual model in the context of statutory protected sites.

Please note that construction workers and future maintenance workers have not been identified in the conceptual model as receptors because risks are considered to be managed through health and safety procedures according to the Health & Safety at Work Act 1974 and associated regulations and guidance.

Where there are potential instances that construction methods may result in short term environmental impacts, these will need to be assessed at design stage, within a construction phase environmental management plan and mitigation measures put in place where required.

6.2 Potential ground gas linkages

6.2.1 Ground gas generation potential

Potential ground gas sources identified for the site and surrounding are shown in **Table 13**.

Table 13 Potential ground gas sources (excludes mine gas)

Potential sources	Indicative ground gas generation potential (CIEH, 2008)	Additional information
On-site		
Natural carbonate soil and strata such as chalk and limestone	Very low	The site is underlain by chalk strata
Off-site		
Sewage sludge	Moderate/low	There are historic sewage pumping station and storage tanks within 250 m of the site
Made ground with low degradable organic content (e.g. up to 5% organic material and no easily degradable waste).	Very low	The adjacent land to site has recently been developed and likely made ground in place

Given the anticipated ground conditions set out above, significant potential sources of ground gas generation have been identified associated with potential sewage sludge.

6.2.2 Radon

The site is in an area where the estimated percentage of homes exceeding the action level of 200 Bq m³ is <1% indicated on available radon potential mapping (UKHSA & BGS, 2022).

In accordance with BRE 211 guidance (2023) and associated building regulations/standards no protection measures are considered to be required in new developments.

6.2.3 Preferential pathways for ground gas migration

Credible preferential pathways potentially connecting the source and receptor through vertical and lateral migration are:

- faults/fissures/fractures in the underlying geology
- building foundations, piled foundations and vibro-stone columns
- construction joints and cracks within building structure
- utility routes and service penetrations into buildings

6.2.4 Sensitive receptors and ground gas linking pathways

Sensitive receptors identified at or in the vicinity of the site that could be affected by the potential ground gas sources identified above comprise:

- on-site human receptors - migration and ingress of ground gases into buildings or confined spaces followed by explosion/asphyxiation
- adjacent site users – migration off-site and ingress of ground gases into buildings or confined spaces followed by explosion/asphyxiation
- future buildings and services - migration and ingress of ground gases into buildings or confined spaces followed by explosion.

The assessment has identified receptors to include building structures and proposed end-users.

Construction workers have not been identified as receptors for the purposes of this assessment. Risks may still be present to construction workers especially where works include the entry into excavations within the ground. Construction workers should undertake appropriate risk assessments and risks should be managed through health and safety procedures and the use of PPE.

6.3 Preliminary risk assessment

The preliminary risk assessment findings and potentially complete contaminant linkages are shown in **Table 14**.

The risk classification is based on the combination of hazard consequence and probability using a risk matrix from CIRIA C552 (Rudland et al., 2001). The requirement for a preliminary qualitative risk assessment is in accordance with LCRM (Environment Agency, 2023). A summary of the risk assessment process is in **Appendix F**.

Table 14 Risk estimation for potentially complete contaminant linkages

Potential source	Potential receptor	Possible pathway	Likelihood	Severity	Risk Rating	Justification
On-site made ground (i.e. fill material associated with historical site development)	Future and Adjacent site users	Oral, dermal, inhalation and dermal contact with impacted soil, vapour, and soil-derived dust and consumption of site-grown produce And Asbestos fibre release followed by inhalation	Unlikely	Medium	Low	The potential for contamination to be on site is very low as the site has been an arable farmland since 1881, with no development. Considering the absence of contamination, the potential for this pathway is unlikely, therefore, the overall risk is considered to be low. to be very low.
	Groundwater in deep aquifer (principal)	Leaching from soils, percolation to aquifer and lateral migration in groundwater.	Unlikely	Medium	Low	The potential for contamination to be on site is very low as the site has been an arable farmland since 1881, with no development. Considering the absence of contamination, the potential for this pathway is unlikely, therefore, the overall risk is considered to be low.
	Surface water (Unnamed drainage ditch)	Lateral migration of dissolved Phase via secondary undifferentiated aquifer and surface runoff and discharge to surface water	Unlikely	Mild	Very Low	The potential for contamination to be on site is very low as the site has been an arable farmland since 1881, with no development. Considering the absence of contamination, the potential for this pathway is unlikely, therefore, the overall risk is considered to be very low.
	Future buildings and services (i.e. foundations and potable water pipes)	Direct contact with contaminated soils	Unlikely	Mild	Very low	The potential for contamination to be on site is very low as the site has been an arable farmland since 1881, with no development. Considering the absence of contamination, the potential for this pathway is unlikely, therefore, the overall risk is considered to be very low.

Potential source	Potential receptor	Possible pathway	Likelihood	Severity	Risk Rating	Justification
Off-site sources						
Electrical substation (historical and current) 70 to 71 m west and 112 m west	Future site residents	Dermal contact with impacted soils and inhalation of vapour migrated laterally and originated from groundwater migrated into the site.	Low likelihood	Medium	Low	Given the distances of the substations , intervening land uses, and the fact adjacent land has recently been developed closure to these, they are considered to pose a low risk. The overall risk is considered to be low.
Historic Council Pumping station for the sewage tank 200 m west. Historic Rural District Council Sewage Tank 224 m northwest	Future site residents	Dermal contact with impacted soils and inhalation of vapour migrated laterally and originated from groundwater migrated into the site	Unlikely	Medium	Low	Considering the distance and the age, the potential for this pathway is unlikely. Therefore, the overall risk is considered to be low
		Lateral migration and accumulation of ground gas leading to explosion or asphyxiation	Very unlikely	Severe	Low	Due to the pumping station being historic, intervening land use between site and the tank, the potential for ground gas is considered low. However, owing to the severity of hazardous gas further characterisation of a potential source is considered to be required.

Potential source	Potential receptor	Possible pathway	Likelihood	Severity	Risk Rating	Justification
	Future buildings and services	Lateral migration and accumulation of ground gas leading to explosion or asphyxiation	Very unlikely	Severe	Low	
Notes: * denotes linkages that may be influenced by impacts of climate change and extreme weather events.						

Risk matrix		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very low	Very low
	Very Unlikely	Low	Very Low	Negligible	Negligible

There are no potentially complete contaminant linkages with a potential risk of moderate to low or higher identified for the site. However, further assessment, particularly related to the ground gas, would be required to confirm the potential low risk associated with the site.

6.4 Data gaps and uncertainties

Key data gaps and uncertainties identified in the CSM at desk study stage include:

- gaps in available historical OS maps 1924 to 1979 (large scale maps), 2003 to time of writing (large scale maps) and 1925 to 1947 (small scale maps)
- no previous investigations were made available for the site, therefore no information on actual ground conditions and the contamination status of the site at this stage
- groundwater depth and flow direction are conceptual at this stage
- ground gas regime for the site is conceptual at this stage.

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 Geo-environmental assessment

The key findings of the geo-environmental assessment are as follows:

- The site has been agricultural land since 1881 (date of first map)
- Site is underlain by secondary undifferentiated aquifer in relation to the superficial deposit of the Lowestoft Formation
- Site is underlain by principal aquifer in relation to the bedrock Chalk

There are no potentially complete contaminant linkages with a potential risk of moderate to low or higher identified for the site.

7.2 Geotechnical assessment

The key findings of the geotechnical assessment are as follows:

- Due to the presence of possible shrinkable soils related to the Lowestoft Formation, foundations may need to be designed taking into account all the normal precautions, including minimum depths, to minimise the risk of future foundation movements in accordance with NHBC Standards, or similar.
- The site is underlain by Chalk strata. Based on the Edmund's risk assessment model for natural dissolution features referred to in CIRIA Report C574 (Lord et al. 2002), the site falls into the 'moderately low anticipated subsidence risk' category.
- There may be sudden lateral changes in ground conditions due to the presence of Lowestoft Formation over a portion of the site.

7.3 Recommendations

The following recommendations are made for further assessment of the site to investigate remaining uncertainties:

- An intrusive investigation to confirm:
 - Geological succession beneath the site and to provide geotechnical data.
 - To confirm the contaminative and ground gas status of the sites and confirm potentially complete pollutant linkages aren't present on site.
 - To support the discharge of the planning conditions relating to the site.

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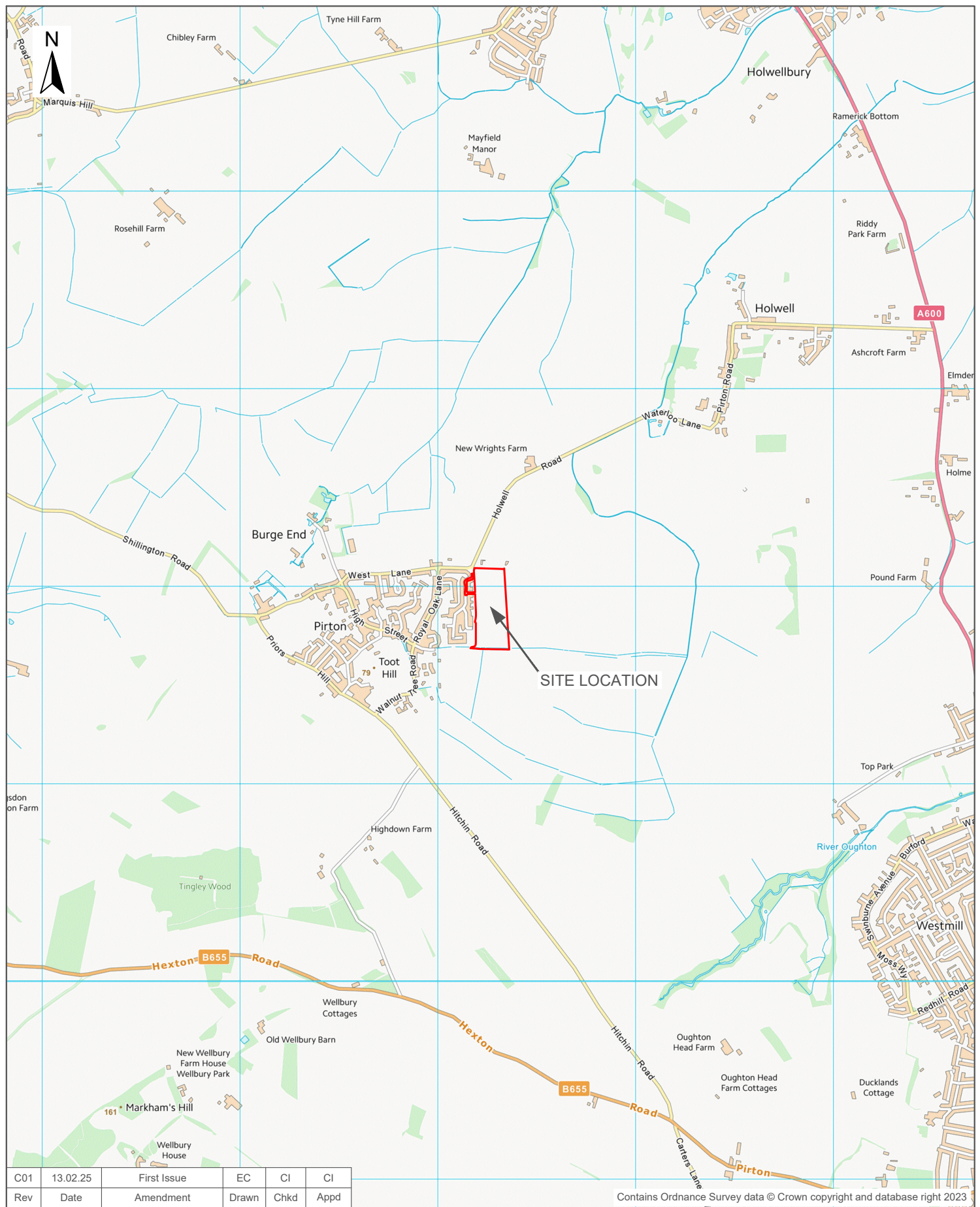
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FIGURES

Figure 1 SITE LOCATION PLAN



C01	13.02.25	First Issue	EC	CI	CI
Rev	Date	Amendment	Drawn	Chkd	Appd

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Client

Gladman Developments Ltd

Project Name

Land off Holwell Road, Pirton

Description

Site Location Plan

Dimension	Size	Scale	Geolocation	Project ID	Drawing no.	Rev	File name
m	A4	1:25,000	515206,231977	340628	11101	C01	340628-CA-111-XX-D-G-11101-C01

Figure 2 SITE LAYOUT PLAN



DO NOT SCALE FROM THIS DRAWING



LEGEND

— Site boundary

Notes:

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Rev	Date	Amendment	Drawn	Chkd	Appd



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Client
Gladman Developments Ltd

Project Name
Land off Holwell Road, Pirton

Description
Site Layout Plan

Project ID	Drawing no.	Revision
340628	11201	C01

File name
340628-CA-112-XX-D-G-11201-C01

Dimensions	Scale	Size
m	1:2000	A3



APPENDICES

Appendix A

SERVICE CONSTRAINTS

APPENDIX A

SERVICE CONSTRAINTS

1. Service Constraints

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1.6 The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the Report inaccurate or unreliable. The information and conclusions contained in this Report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the Report in the future shall be at the Client's own and sole risk.

1.7 The observations and conclusions described in this Report are based solely upon the Services which were provided pursuant to the agreement between the Client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out, or required by the Appointment between the Client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this Report, RSK did not seek to evaluate the presence on or off site of asbestos, invasive plants, electromagnetic fields, lead paint, heavy metals, radon gas, fuel storage, persistent bio-accumulative or toxic chemicals (including PFAS and related compounds) or other radioactive or hazardous materials, unless specifically identified in the Services.

1.8 The Services are based upon RSK's observations of existing physical conditions at the Site gained from a visual inspection of the site together with RSK's interpretation of desk based publicly available information, including documentation, obtained from third parties and from the Client on the history and usage of the site, unless specifically identified in the Services and the limitations below:

- a. The Services were based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely.
- b. The Services were limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the visual inspection.
- c. The Services did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the Client or third parties, including laboratories and information services, during the performance of the Services.
- d. The Client has identified in writing to RSK, the information, reports, findings, surveys and preliminary works RSK may not rely upon when providing the Services.

RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK, and including the doing of any independent investigation of the information provided to RSK, save as otherwise provided in the terms of the Appointment between the Client and RSK.

1.9 Any site drawing(s) provided in this Report is (are) not meant to be an accurate base plan for scale measurement but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for accurate setting out and should be considered indicative only.

1.10 Should RSK be requested to review the Report after the date of issue of this Report, RSK shall be entitled to additional payment at the existing rates, or such other terms as agreed between RSK and the Client.

2. Service Constraints where the Report provides an intrusive assessment of ground conditions:

2.1 The intrusive environmental ground investigation aspects of the Services are a limited sampling of soil from the site, at pre-determined locations based on the known historic / operational configuration of the site. The conclusions given in this Report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent

of the limited area depends on the properties of the materials adjacent and local conditions, together with the position of any current structures and underground utilities and facilities, and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters (as stipulated in the scope agreed between the Client and RSK, based on an understanding of the available operational and historical information) and it should not be inferred that other chemical species (not tested) are not present.

2.2 The comments given in this Report and the opinions expressed are based on the ground conditions encountered during the site work and on the results of tests made in the field and in the laboratory. The extent of the exploratory holes, laboratory testing and monitoring undertaken may have been restricted due to a number of factors including accessibility, the presence of buried or overhead services, current development, site usage, timescales or the Client's specification. The exploratory holes only assess a small proportion of the site area with respect to the site as a whole, and as such may only provide an indicative assessment of ground conditions on site. There may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account. In particular, it should be noted that there may be areas of made ground not detected due to the limited nature of the investigation or the thickness and quality of made ground across the site may be variable. In addition, groundwater levels and ground gas concentrations and flows, may vary from those reported due to seasonal, or other, effects and the limitations stated in the data should be recognised. The presence of hotspots of undisclosed contamination or exceptional and unforeseen ground conditions cannot be discounted.

2.3 Where the Services include Investigation of an exploratory nature or relating to physical ground works, any costings and prices provided in the Report are estimated and provided for guidance purposes only. The actual cost and time quantities shall be remeasured and shall be dependent upon the ground or other conditions, constraints present, and number and depth of the investigation locations, which shall influence the number of samples and tests required, and the quantities of soil being classified.

2.4 Asbestos is often observed to be present in soils in discrete areas. Whilst asbestos-containing materials may have been locally encountered during the fieldworks or supporting laboratory analysis, the history of brownfield and demolition sites indicates that asbestos fibres may be present more widely in soils and aggregates, which could be encountered during more extensive ground works. However, this Report does not constitute an asbestos survey. On this basis, the presence of asbestos on site cannot be discounted and a full asbestos survey should be undertaken.

2.5 Unless stated otherwise, only preliminary geotechnical recommendations are presented in this Report and these should be verified in a Geotechnical Design Report, once proposed construction and structural design proposals are confirmed. Eurocode 7 gives guidance on the type of sampling, sample quality, number and spacing of intrusive investigations, and number of laboratory tests required. It is intended that the Geotechnical Information section of this Report will fulfil the general requirements of the Ground Investigation Report as set out in section 6 of Eurocode7, although this is subject to the restrictions imposed on the investigation, as listed above. For geotechnical design, Eurocode 7 requires the Geotechnical Design Report to address both the geotechnical and structural aspects of the geotechnical design for both the limit and serviceability states. The Geotechnical Appraisal section of this Report will not meet the requirements of a Geotechnical Design Report (GDR) and should therefore be used for preliminary guidance only.

3. Service Constraints where the Report relates to Surface Water Management:

3.1 The Surface Water Management Inspection (SWMI) Report, documents provided, observations, actions, and recommendations, with respect to the management of potential pollution issues to surface waters, made during the site Inspection visit, are those present at the time of the visit, and may not represent those recorded by others on the same day.

3.2 The comments given in this Report and the opinions expressed are based on the weather, ground and ground water conditions encountered during the site work and on the results of tests made in the field and in the laboratory. However, there may be conditions pertaining to the site that have not been disclosed by the inspection and therefore could not be taken into account. In addition, groundwater levels and flows, may vary from those Reported due to seasonal, or other, effects and the limitations stated in the data should be recognised.

3.3 RSK places a degree of dependence upon oral information provided by site representatives, which is not readily verifiable through visual inspection, or supported by any available written documentation. RSK shall not be held responsible for conditions or consequences arising from relevant facts that were not fully disclosed by facility or site representatives at the time this Report was prepared.

3.4 This Report is a live document, to be continually reviewed and updated as the development progresses or other changes occur on site. RSK can only maintain the currency of this Report through the Client requesting support with supplementary site visits or attendance at meetings ahead of key stages of the development in relation to surface water management. Our risk rating assesses a number of risk factors in line with the source-pathway- receptor model and is therefore subject to constant change.

3.5 Standard design drawings are indicative. Material types, dimensions and construction details will need to be adjusted by the Client to suit the specific conditions / flows on Site.

3.6 The full responsibility for implementing the site-specific protection and maintenance measures to protect the surface water system as stated in this Report, remains with the Client and their site management team. Additional control measures may be required to achieve the objectives set out in the Surface Water Management Plan to be implemented and financed by the Client.

4. Service Constraints where the Report relates to Waste Management:

4.1 In accordance with the definition provided in the Waste Framework Directive (WFD), materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded, by the holder'. Naturally occurring soils are not considered waste if re-used on the site of origin for the purposes of development. Soils such as made ground that are not of clean and natural origin (irrespective of whether they are contaminated or not) and other materials such as recycled aggregate, do not necessarily become waste until the criteria above are met. Excavation arisings from the development may therefore be classified as waste if surplus to requirements and/or unsuitable for re-use.

4.2 It is the duty of the waste producer, to ensure that all waste is accurately classified prior to waste disposal. Technical Guidance WM3 (EA, 2018) sets out in its Appendix D requirements for waste sampling. It is a legal requirement to correctly assess and classify waste. The level of sampling should be proportionate to the volume of waste and its heterogeneity. Unless otherwise stated, the waste assessment presented in this Report should be considered as preliminary and further testing and assessment of the waste under the provisions of a Waste Sampling Plan may be required to obtain the necessary level of data required for basic characterisation of the waste in support of disposal.

4.3 Unless stated otherwise in the Report, information relating to historical operations at the site was not reviewed as part of the assessment by RSK. In addition, unless otherwise stated in the Services, RSK was not present during the collection of the samples nor had any input on the chemical testing suite. Therefore, the waste assessment and classification detailed in this Report are based solely on any information that were provided to RSK (e.g., laboratory chemical data, exploratory hole records) and were completed without prejudice for our Client.

4.4 RSK assumes that any ground investigation data, chemical testing results etc., that were provided by the Client to inform the waste assessment and supporting review were carried out in accordance with current best practice and relevant guidance/ standards, where applicable. Thus, the



comments given in this Report and the opinions expressed are based solely on the information provided by the Client. However, it is noted that there may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account as part of the RSK assessment.

5. Service Constraints for Construction Environmental Management Plan Reports:

5.1 This Report should be considered in the light of any changes in legislation, statutory requirement or industry practices that may have occurred subsequent to the date of issue.

5.2 The measures and comments outlined in this Report and any opinions expressed are based on the plans provided at the time and discussions with relevant parties. However, there may be conditions pertaining to the site that have not been disclosed by investigations and therefore could not be taken into account.

5.3 This CEMP is a live document and is subject to change throughout the project, as and when necessary, to ensure management of environmental aspects remains relevant, and to ensure continued compliance with legislation and commitments as they may change. RSK understands that this CEMP will be reviewed by the Client every six months and updated as and when necessary.

5.4 It is the full responsibility of the Principal Contractor/ Client to ensure that their works do not contravene legal requirements, and adherence to this CEMP alone cannot be a full defence regarding legal action against the Principal Contractor.

6. Service Constraints where the Report relates to Ground Gas Membrane Verification:

6.1 This Report is limited to the verification of the gas resistant membrane/vapour membrane/radon barrier after installation and no inspections were undertaken of the substrate (i.e. prepared ground). The Report therefore does not constitute as a full verification of ground gas protection system.

6.2 The comments given in this Report and the opinions expressed, are based on the condition of the ground gas membrane as encountered at the time of inspection by suitably qualified personnel. RSK cannot accept liability for any subsequent change to the status of the gas membrane by follow-on trades or other construction activity.

6.3 Where not designed by RSK, the verification of protection measures is carried out with reference to the gas protection design provided by the Client. RSK assume the scope of gas protection measures as determined by third parties to be correct and to have achieved any required approval from authorities.

6.4 The Ground Gas Design Report/Remediation Strategy and Verification Plan contains details of the procedures to be adopted for inspection and validation of the works. However, it should be noted that responsibility for the correct implementation of the strategy lies with the appointed contractor. RSK cannot be held responsible for any remedial works that are carried out without the agreed procedures involving either direct supervision by RSK, or inspection and validation of the works by a representative from RSK.

7. Service Constraints for Environmental Due Diligence (EDD) Reports:

7.1 The comments given in this Report and the opinions expressed are based on the information obtained and reviewed as part of the desk-based assessment. However, there may be conditions pertaining to the Site that have not been disclosed by the assessment and therefore could not be taken into account. Furthermore, no intrusive investigations, monitoring or sampling have been undertaken to confirm the environmental status of the site, therefore any comments relating to ground conditions and subsurface contamination are based solely on a review of desk-based information.



7.2 This Report describes the results of the EDD exercise. The scope of this EDD Report, where appropriate, covers legal or regulatory compliance with respect to UK or international regulations associated with environmental matters.

7.3 As with any EDD exercise, there is a certain degree of dependence upon information provided by the target company. The EDD does not include a site walkover / visit or liaison with site representatives unless identified in the Services. Therefore, the assessment is based on the available desk study information. Also, there is a certain degree of dependence upon oral information provided by site representatives, which is not readily verifiable through visual inspection, or supported by any available written documentation. RSK shall not be held responsible for conditions or consequences arising from relevant facts that were not fully disclosed by facility or site representatives at the time this EDD exercise was performed.

7.4 This Report, including all supporting data and notes (collectively referred to hereinafter as "information"), was prepared or collected by RSK for the benefit of its Client.

7.5 The comments given in this Report and the opinions expressed are based on the information obtained and reviewed as part of the desk-based assessment and the site inspection visit. However, there may be conditions pertaining to the Site that have not been disclosed by the assessment and therefore could not be taken into account. Furthermore, no intrusive investigations, monitoring or sampling have been undertaken to confirm the environmental status of the Site therefore any comments relating to ground conditions and subsurface contamination are based solely on a review of desk-based information and observations collected during the site inspection visit.

8. Service Constraints for Ground source heat energy Reports:

8.1 It is understood that this is a desktop survey only and that there are no requirements for a site walkover, service utility survey, or provision of service plans. These services can be provided upon request if required.

8.2 At a later stage, it is possible that a thermal response test (TRT) will need to be completed, for which a test borehole will have to be drilled, and these would be costed at the time. RSK can provide all aspects of subsequent site work for a GSHP system if required.

9. Service Constraints for Water Abstraction Borehole Reports:

9.1 The Report aims principally to only identify and assess the suitability of the site for a water abstraction borehole. This Report should be considered in the light of any changes in legislation, statutory requirements, and industry practices, that have occurred subsequent to the date of the Report.

9.2 Unless stated in the Report, the opinions expressed in this Report including all comments and recommendations provided are on the basis of the information obtained from a desk-based assessment.

Appendix B

ENVIRONMENTAL DATABASE REPORT



PIRTON, HERTFORDSHIRE, SG5 3EQ

Order Details

Date: 06/02/2025
Your ref: 340628 / P02158718
Our Ref: GS-25D-S3W-1Y4-SLW

Site Details

Location: 515263 231888
Area: 6.75 ha
Authority: [North Hertfordshire District Council](#) ↗



Summary of findings

[p. 2 >](#)

Aerial image

[p. 9 >](#)

OS MasterMap site plan

[p.14 >](#)

[Insight User Guide](#) ↗

Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	6	1	-
16 >	1.2 >	Historical tanks >	0	0	1	0	-
16 >	1.3 >	Historical energy features >	0	0	1	3	-
17	1.4	Historical petrol stations	0	0	0	0	-
17	1.5	Historical garages	0	0	0	0	-
17	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
18 >	2.1 >	Historical industrial land uses >	0	0	6	1	-
19 >	2.2 >	Historical tanks >	0	0	1	0	-
19 >	2.3 >	Historical energy features >	0	0	2	6	-
20	2.4	Historical petrol stations	0	0	0	0	-
20	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
22	3.6	Licensed waste sites	0	0	0	0	-
22 >	3.7 >	Waste exemptions >	0	0	1	1	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
24 >	4.1 >	Recent industrial land uses >	0	0	2	-	-
25	4.2	Current or recent petrol stations	0	0	0	0	-
25	4.3	Electricity cables	0	0	0	0	-
25	4.4	Gas pipelines	0	0	0	0	-
25	4.5	Sites determined as Contaminated Land	0	0	0	0	-



25	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
26	4.7	Regulated explosive sites	0	0	0	0	-
26	4.8	Hazardous substance storage/usage	0	0	0	0	-
26	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
26	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
26	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
27	4.12	Radioactive Substance Authorisations	0	0	0	0	-
27 >	4.13 >	Licensed Discharges to controlled waters >	0	0	0	1	-
27	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
27	4.15	Pollutant release to public sewer	0	0	0	0	-
28	4.16	List 1 Dangerous Substances	0	0	0	0	-
28	4.17	List 2 Dangerous Substances	0	0	0	0	-
28	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
28	4.19	Pollution inventory substances	0	0	0	0	-
28	4.20	Pollution inventory waste transfers	0	0	0	0	-
29	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
30 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
32 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
34 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
35 >	5.4 >	Groundwater vulnerability- soluble rock risk >	Identified (within 0m)				
36	5.5	Groundwater vulnerability- local information	None (within 0m)				
37 >	5.6 >	Groundwater abstractions >	0	0	0	0	5
39 >	5.7 >	Surface water abstractions >	0	0	0	0	6
40 >	5.8 >	Potable abstractions >	0	0	0	0	3
41 >	5.9 >	Source Protection Zones >	0	0	0	1	-
41	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
42 >	6.1 >	Water Network (OS MasterMap) >	6	4	4	-	-



44 >	6.2 >	Surface water features >	1	3	2	-	-
44 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
44 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
45 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
46	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
46	7.2	Historical Flood Events	0	0	0	-	-
46	7.3	Flood Defences	0	0	0	-	-
47	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
47	7.5	Flood Storage Areas	0	0	0	-	-
48	7.6	Flood Zone 2	None (within 50m)				
48	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
49	8.1	Surface water flooding	Negligible (within 50m)				
Page	Section	Groundwater flooding >					
50 >	9.1 >	Groundwater flooding >	Moderate-High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
51	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
52	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
52	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
52	10.4	Special Protection Areas (SPA)	0	0	0	0	0
52	10.5	National Nature Reserves (NNR)	0	0	0	0	0
53 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
53 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	2
53	10.8	Biosphere Reserves	0	0	0	0	0
54	10.9	Forest Parks	0	0	0	0	0
54	10.10	Marine Conservation Zones	0	0	0	0	0
54 >	10.11 >	Green Belt >	0	0	0	0	1
54	10.12	Proposed Ramsar sites	0	0	0	0	0



55	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
55	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
55	10.15	Nitrate Sensitive Areas	0	0	0	0	0
55 >	10.16 >	Nitrate Vulnerable Zones >	2	0	0	0	2
57 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
58	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
59	11.1	World Heritage Sites	0	0	0	-	-
60	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
60	11.3	National Parks	0	0	0	-	-
60 >	11.4 >	Listed Buildings >	0	0	5	-	-
61 >	11.5 >	Conservation Areas >	0	0	1	-	-
61	11.6	Scheduled Ancient Monuments	0	0	0	-	-
61	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
62 >	12.1 >	Agricultural Land Classification >	Grade 3 (within 250m)				
63	12.2	Open Access Land	0	0	0	-	-
63	12.3	Tree Felling Licences	0	0	0	-	-
63	12.4	Environmental Stewardship Schemes	0	0	0	-	-
64 >	12.5 >	Countryside Stewardship Schemes >	1	1	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
65 >	13.1 >	Priority Habitat Inventory >	1	3	0	-	-
66	13.2	Habitat Networks	0	0	0	-	-
66	13.3	Open Mosaic Habitat	0	0	0	-	-
66	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
67 >	14.1 >	10k Availability >	Identified (within 500m)				
68	14.2	Artificial and made ground (10k)	0	0	0	0	-
69	14.3	Superficial geology (10k)	0	0	0	0	-

69	14.4	Landslip (10k)	0	0	0	0	-
70	14.5	Bedrock geology (10k)	0	0	0	0	-
70	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
71 >	15.1 >	50k Availability >	Identified (within 500m)				
72 >	15.2 >	Artificial and made ground (50k) >	0	0	0	1	-
73	15.3	Artificial ground permeability (50k)	0	0	-	-	-
74 >	15.4 >	Superficial geology (50k) >	1	0	1	2	-
75 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
75	15.6	Landslip (50k)	0	0	0	0	-
75	15.7	Landslip permeability (50k)	None (within 50m)				
76 >	15.8 >	Bedrock geology (50k) >	1	0	3	1	-
77 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
77	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
78 >	16.1 >	BGS Boreholes >	0	0	7	-	-
Page	Section	Natural ground subsidence >					
80 >	17.1 >	Shrink swell clays >	Low (within 50m)				
81 >	17.2 >	Running sands >	Very low (within 50m)				
83 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
84 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
85 >	17.5 >	Landslides >	Very low (within 50m)				
87 >	17.6 >	Ground dissolution of soluble rocks >	Very low (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
89	18.1	BritPits	0	0	0	0	-
90 >	18.2 >	Surface ground workings >	0	0	3	-	-
90	18.3	Underground workings	0	0	0	0	0
90	18.4	Underground mining extents	0	0	0	0	-
90	18.5	Historical Mineral Planning Areas	0	0	0	0	-



91 >	18.6 >	Non-coal mining >	1	0	1	0	0
91	18.7	JPB mining areas	None (within 0m)				
91	18.8	The Coal Authority non-coal mining	0	0	0	0	-
92	18.9	Researched mining	0	0	0	0	-
92	18.10	Mining record office plans	0	0	0	0	-
92	18.11	BGS mine plans	0	0	0	0	-
92	18.12	Coal mining	None (within 0m)				
92	18.13	Brine areas	None (within 0m)				
93	18.14	Gypsum areas	None (within 0m)				
93	18.15	Tin mining	None (within 0m)				
93	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
94	19.1	Natural cavities	0	0	0	0	-
94	19.2	Mining cavities	0	0	0	0	0
94	19.3	Reported recent incidents	0	0	0	0	-
94	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
96 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
98 >	21.1 >	BGS Estimated Background Soil Chemistry >	4	0	-	-	-
98	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
99	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
100	22.1	Underground railways (London)	0	0	0	-	-
100	22.2	Underground railways (Non-London)	0	0	0	-	-
100	22.3	Railway tunnels	0	0	0	-	-
100	22.4	Historical railway and tunnel features	0	0	0	-	-
100	22.5	Royal Mail tunnels	0	0	0	-	-
101	22.6	Historical railways	0	0	0	-	-



101	22.7	Railways	0	0	0	-	-
101	22.8	Crossrail 2	0	0	0	0	-
101	22.9	HS2	0	0	0	0	-



Recent aerial photograph



Capture Date: 27/05/2023

Site Area: 6.75ha



Recent site history - 2020 aerial photograph



Capture Date: 07/04/2020

Site Area: 6.75ha



Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 6.75ha



Recent site history - 2007 aerial photograph



Capture Date: 16/11/2007

Site Area: 6.75ha



Recent site history - 1999 aerial photograph



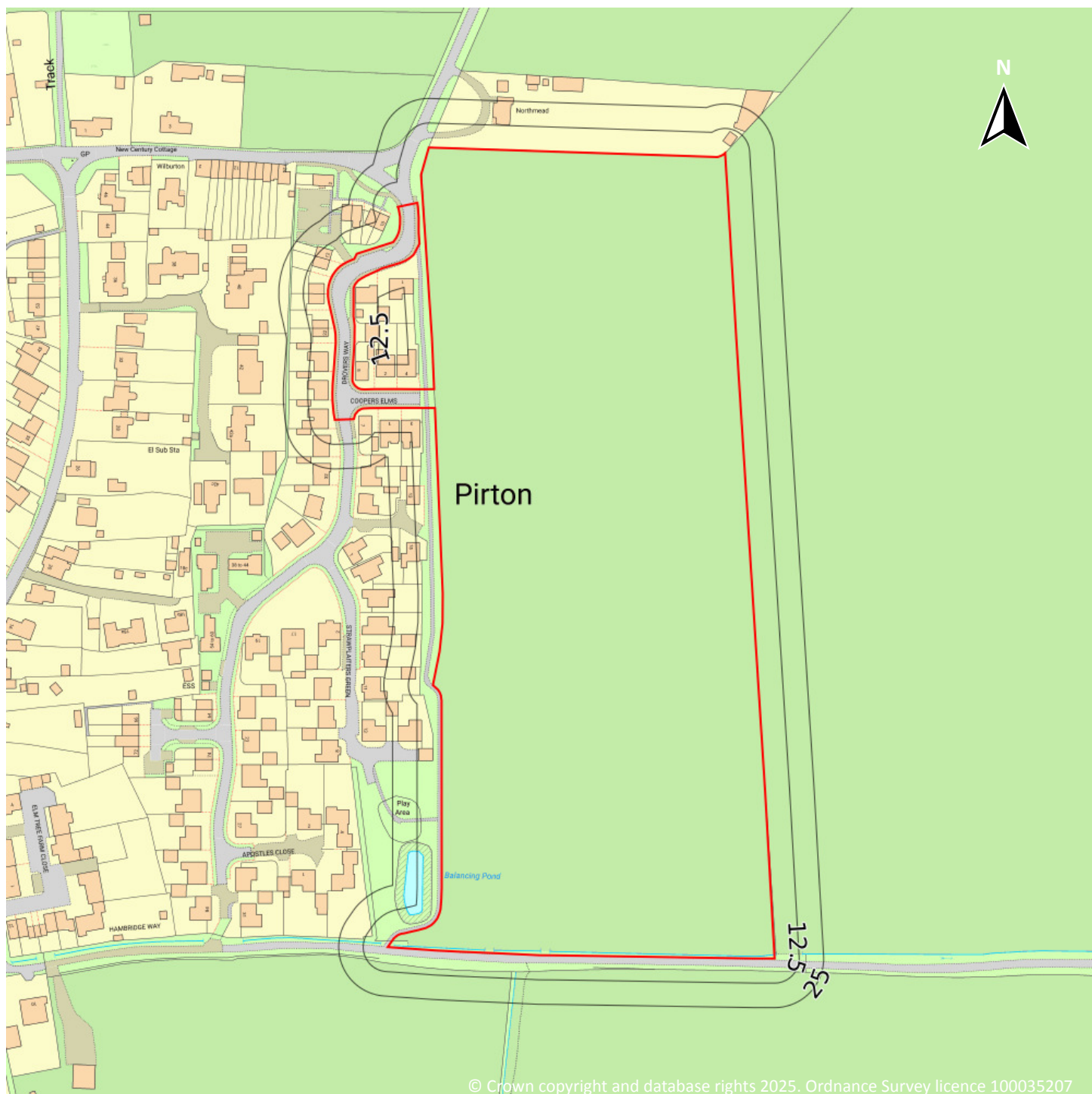
Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2025. All Rights Reserved.

Capture Date: 27/05/1999

Site Area: 6.75ha



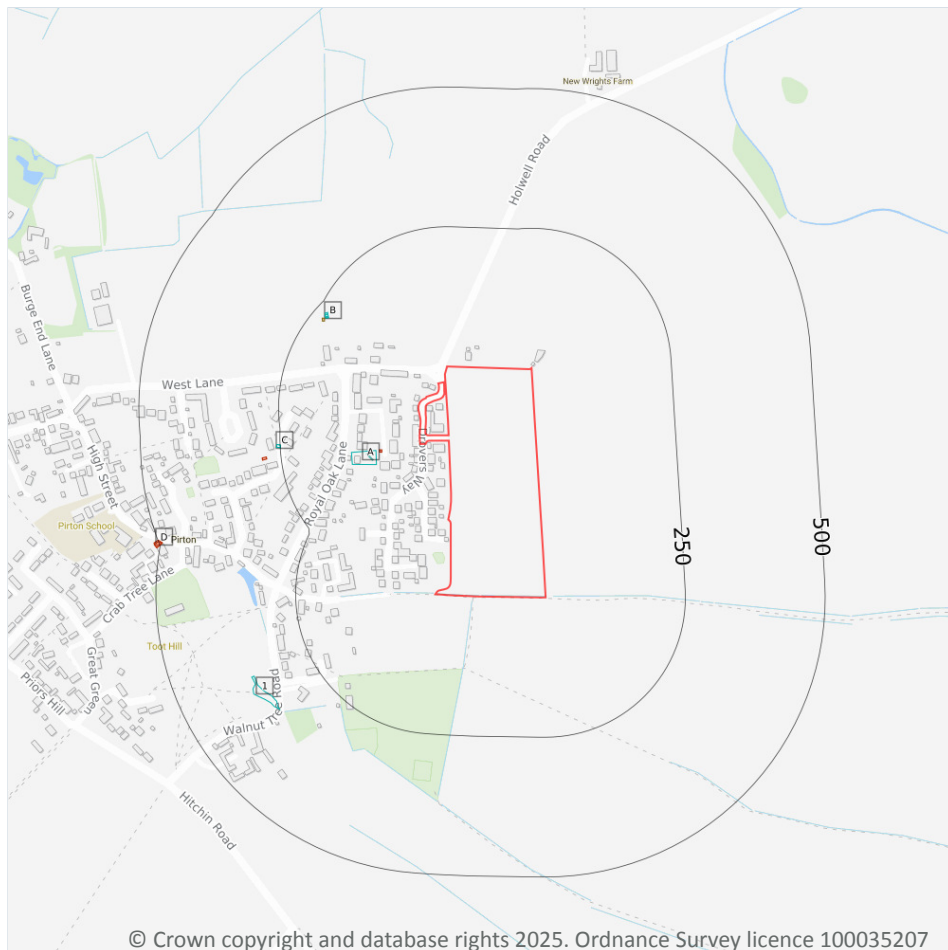
OS MasterMap site plan



Site Area: 6.75ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

1.1 Historical industrial land uses

Records within 500m

7

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
A	80m W	Pumping Station	1925	2093419



ID	Location	Land use	Dates present	Group ID
B	223m NW	Sewage Tank	1922	2103944
B	223m NW	Sewage Tank	1947	2137450
B	225m NW	Sewage Tank	1925	2114535
C	250m W	Pumping Station	1922	2125943
C	250m W	Pumping Station	1947	2126466
1	343m SW	Unspecified Ground Workings	1960	2091071

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

1

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
B	224m NW	Rural District Council Sewage Tank	1924	360725

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

4

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
A	69m W	Electricity Substation	1980 - 1993	253939



ID	Location	Land use	Dates present	Group ID
C	276m W	Electricity Substation	1980 - 1995	255189
D	494m W	Electricity Substation	1995	254016
D	495m W	Electricity Substation	1980	257458

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m **0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m **0**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

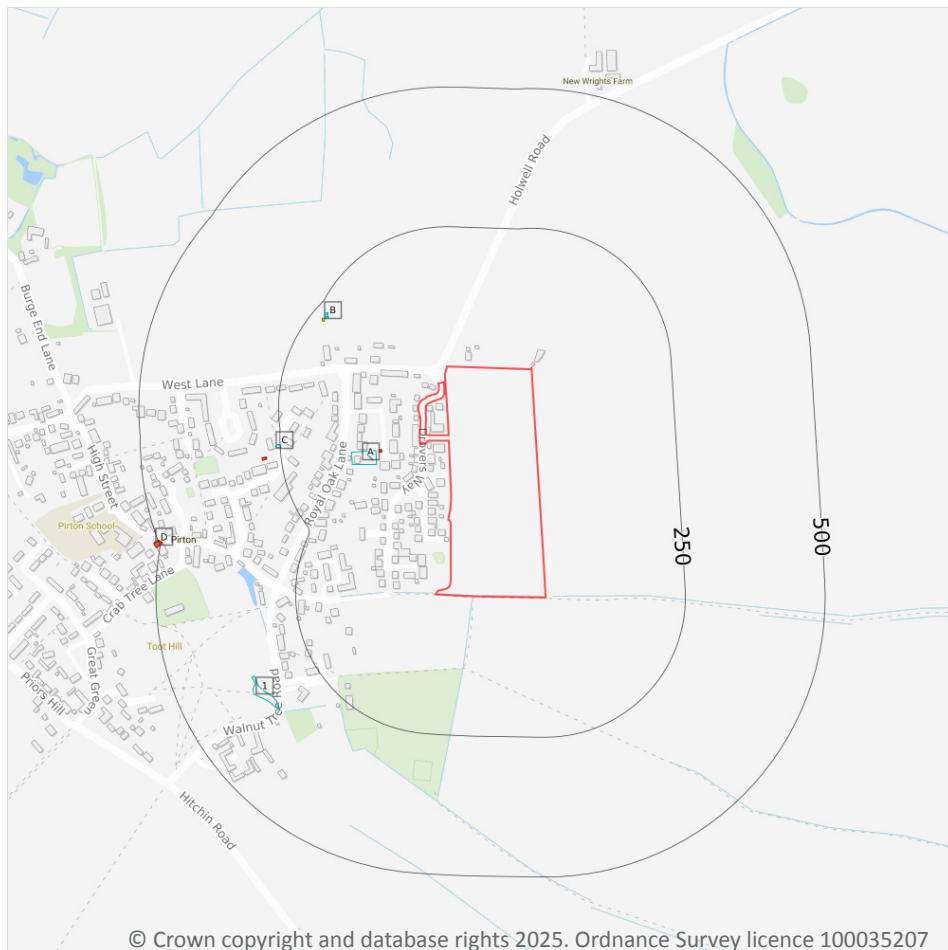
Records within 500m **0**

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

2.1 Historical industrial land uses

Records within 500m

7

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 18](#) >

ID	Location	Land Use	Date	Group ID
A	80m W	Pumping Station	1925	2093419
B	223m NW	Sewage Tank	1947	2137450
B	223m NW	Sewage Tank	1922	2103944



ID	Location	Land Use	Date	Group ID
B	225m NW	Sewage Tank	1925	2114535
C	250m W	Pumping Station	1947	2126466
C	250m W	Pumping Station	1922	2125943
1	343m SW	Unspecified Ground Workings	1960	2091071

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	1
----------------------------	----------

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 18 >](#)

ID	Location	Land Use	Date	Group ID
B	224m NW	Rural District Council Sewage Tank	1924	360725

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	8
----------------------------	----------

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 18 >](#)

ID	Location	Land Use	Date	Group ID
A	69m W	Electricity Substation	1980	253939
A	70m W	Electricity Substation	1993	253939
C	276m W	Electricity Substation	1980	255189
C	276m W	Electricity Substation	1995	255189
C	276m W	Electricity Substation	1995	255189
D	494m W	Electricity Substation	1995	254016



ID	Location	Land Use	Date	Group ID
D	494m W	Electricity Substation	1995	254016
D	495m W	Electricity Substation	1980	257458

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

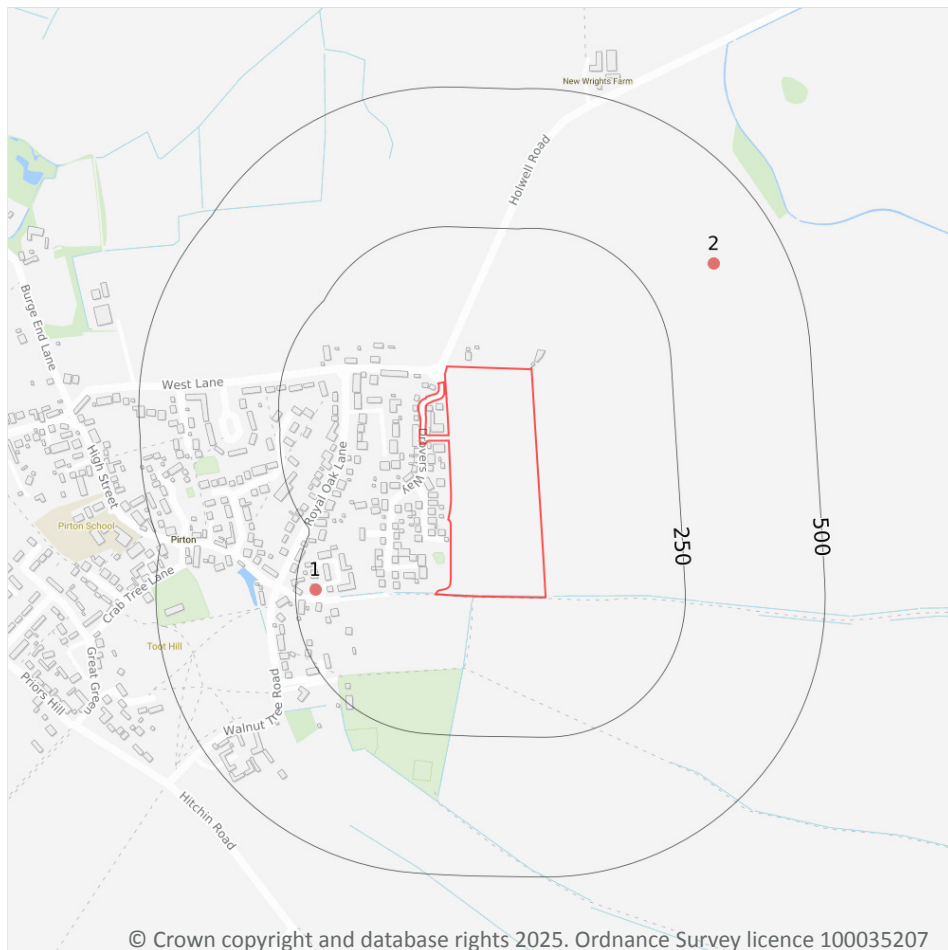
0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



— Site Outline
Search buffers in metres (m)
● Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m**0**

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m**0**

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m**0**

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m**0**

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m**2**

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

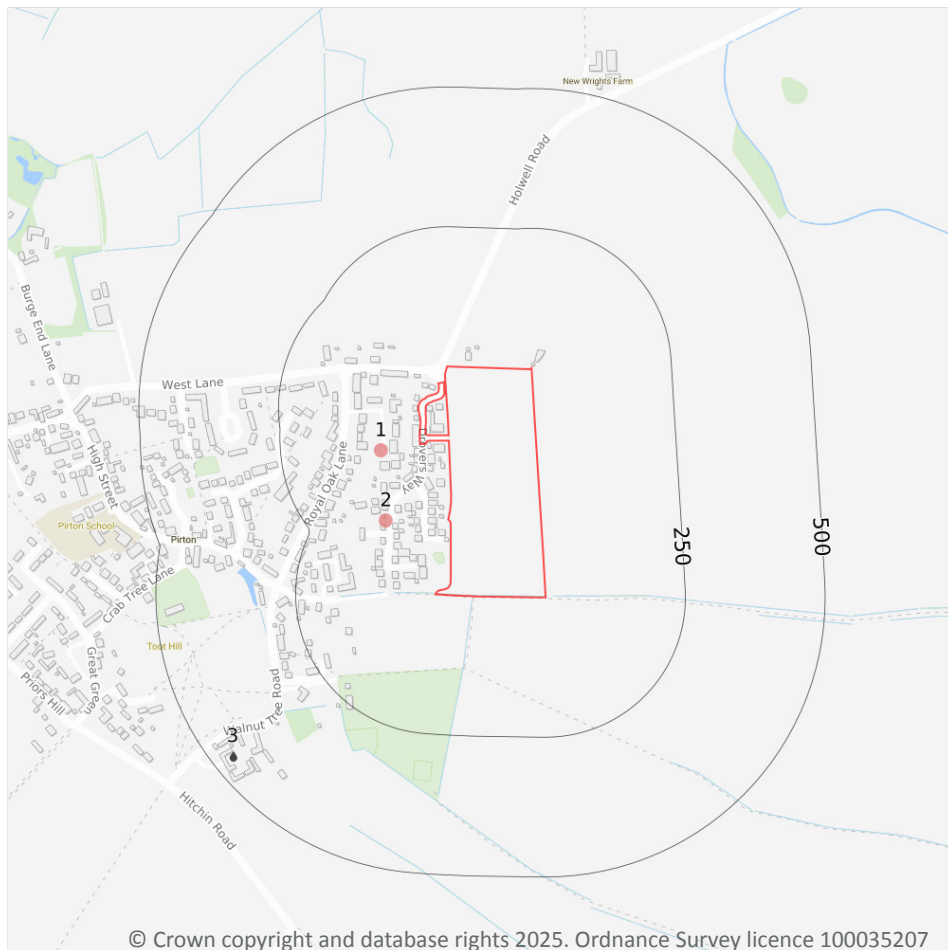
Features are displayed on the Waste and landfill map on [page 21](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
1	216m SW	A J Walker, Elm Tree Far, Hambridge Way, Pirton, Hitchin, Sg5 3qs	WEX089068	Using waste exemption	On a farm	Use of waste in construction
2	375m NE	-	WEX371958	Storing waste exemption	On a farm	Storage of sludge

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m

2

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 24](#) >

ID	Location	Company	Address	Activity	Category
1	71m W	Electricity Sub Station	Hertfordshire, SG5	Electrical Features	Infrastructure and Facilities
2	112m W	Electricity Sub Station	Hertfordshire, SG5	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.



4.2 Current or recent petrol stations

Records within 500m**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m**0**

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m**0**

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.



4.7 Regulated explosive sites

Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m

0

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m

1

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991. Features are displayed on the Current industrial land use map on [page 24](#) >

ID	Location	Address	Details	
3	464m SW	WALNUTTREEFARM PIRTON,PIRTON,HIT CHIN,SG5	Effluent Type: UNSPECIFIED Permit Number: PR1NFG0514 Permit Version: 1 Receiving Water: unknown	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 24/05/1963 Effective Date: 24/05/1963 Revocation Date: 20/02/1991

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.16 List 1 Dangerous Substances

Records within 500m**0**

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m**0**

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m**0**

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m**0**

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m**0**

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



4.21 Pollution inventory radioactive waste

Records within 500m

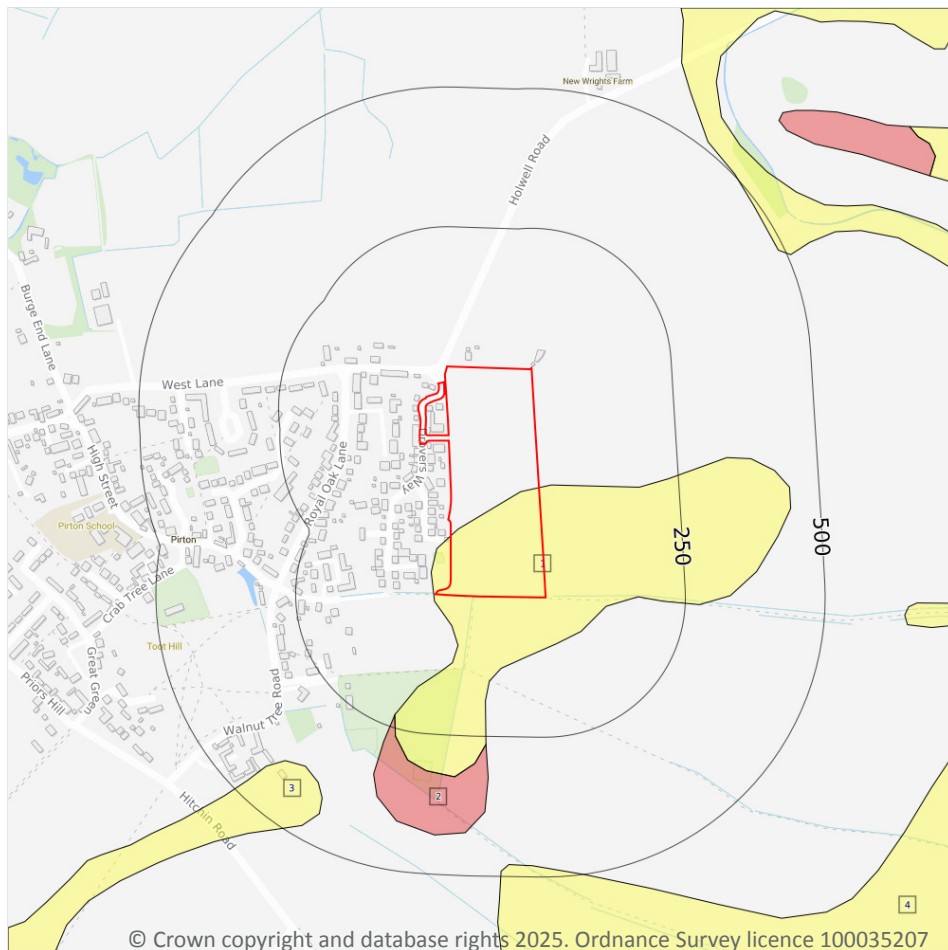
0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



5 Hydrogeology - Superficial aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

4

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 30](#) >

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	228m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

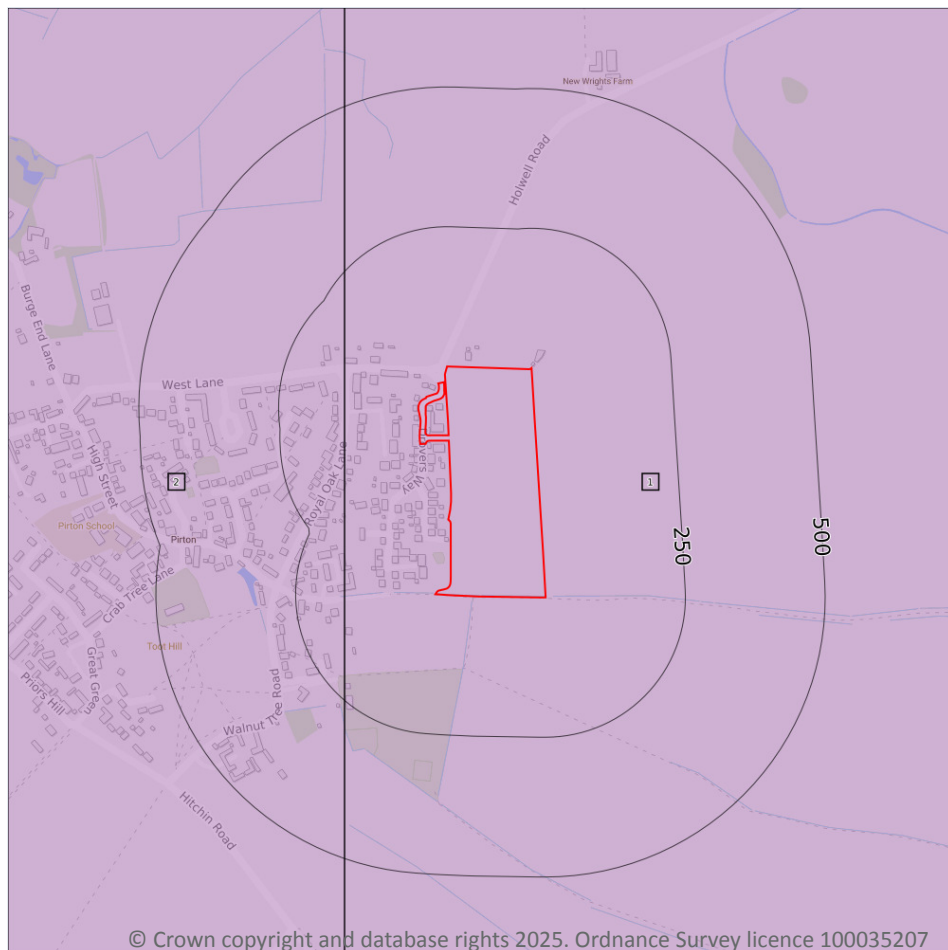


ID	Location	Designation	Description
3	386m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	479m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 32](#) >

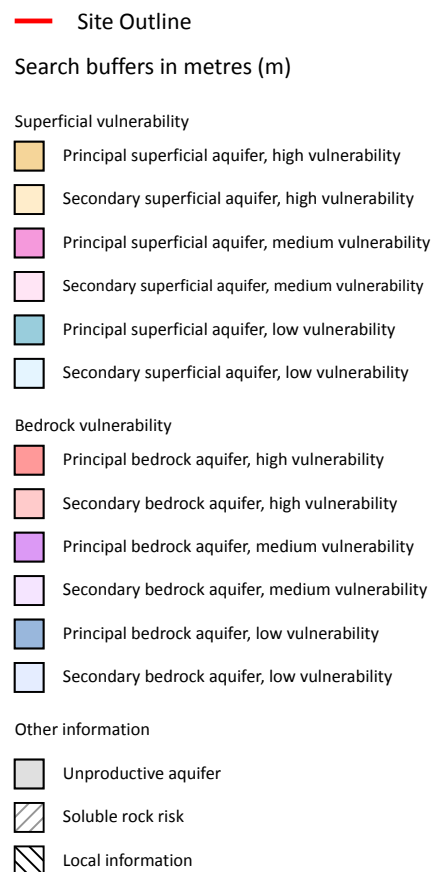
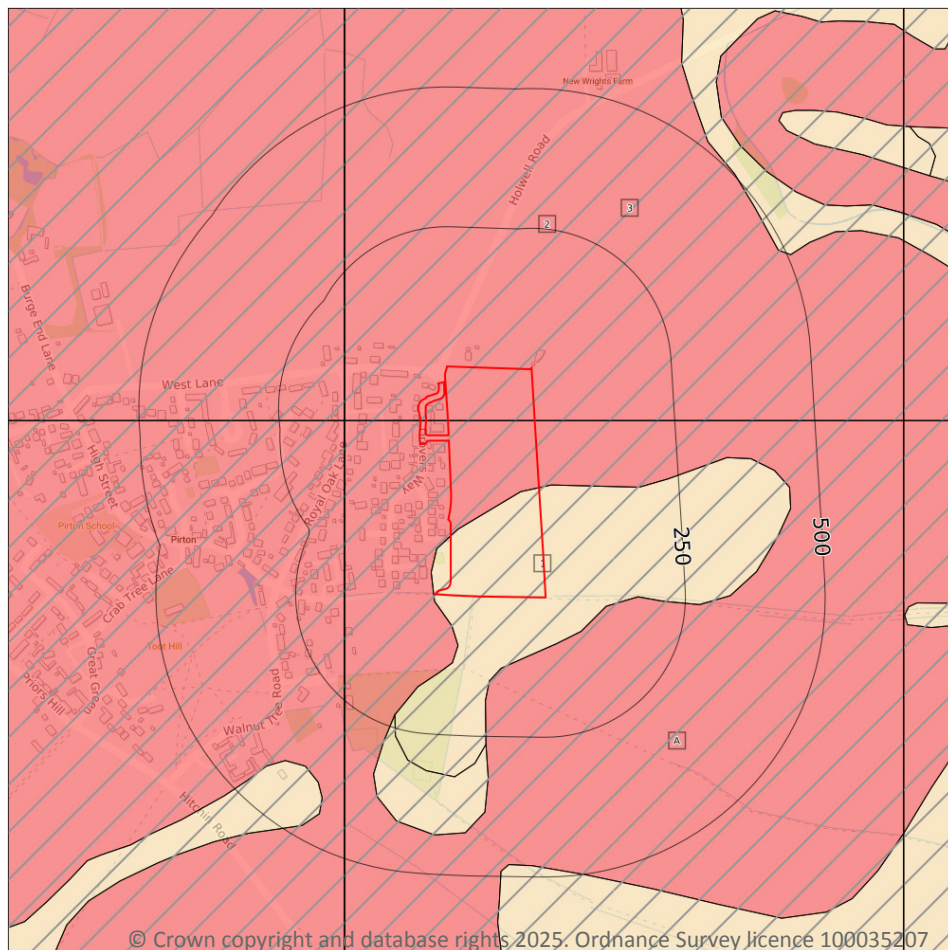
ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	132m NW	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers



This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

3

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 34](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
2	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
A	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	2
-----------------	---

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
3	Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.	12.0%
A	Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.	31.0%

This data is sourced from the British Geological Survey and the Environment Agency.



5.5 Groundwater vulnerability- local information

Records on site

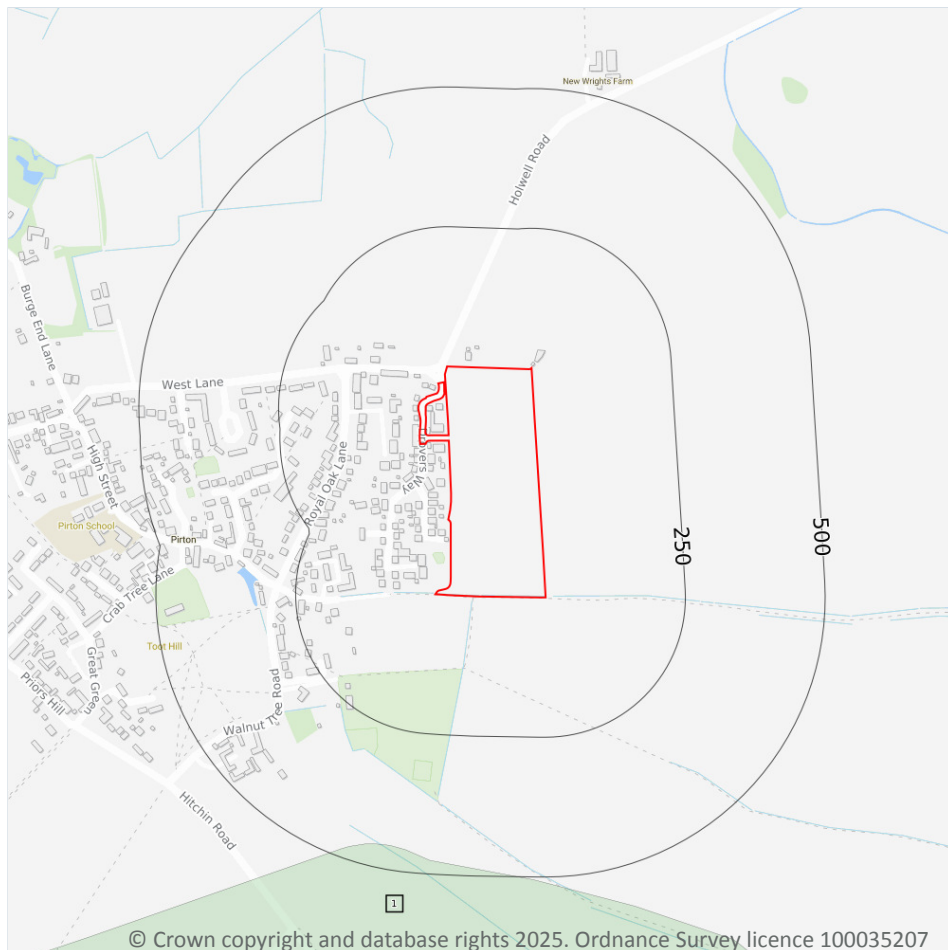
0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.



Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

5

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 37](#) >



ID	Location	Details	
-	1092m SW	Status: Historical Licence No: 6/33/13/*G/0024 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT WALNUT TREE FARM Data Type: Point Name: ROGERS Easting: 514700 Northing: 230700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/02/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1995 Version End Date: -
-	1662m E	Status: Historical Licence No: 6/33/13/*G/0047 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL N OF HAMBRIDGE WAY Data Type: Point Name: PARKER Easting: 517020 Northing: 231620	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/11/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1969 Version End Date: -
-	1930m S	Status: Active Licence No: 6/33/13/*G/0011 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL, OUGHTON HEAD, HITCHIN Data Type: Point Name: Affinity Water Limited Easting: 515904 Northing: 229832	Annual Volume (m ³): 1659323 Max Daily Volume (m ³): 6547 Original Application No: NPS/WR/033625 Original Start Date: 01/11/1966 Expiry Date: - Issue No: 103 Version Start Date: 02/11/2020 Version End Date: -
-	1930m S	Status: Active Licence No: 6/33/13/*G/0011 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL, OUGHTON HEAD, HITCHIN Data Type: Point Name: Affinity Water Limited Easting: 515904 Northing: 229832	Annual Volume (m ³): 1659323 Max Daily Volume (m ³): 6547 Original Application No: NPS/WR/033625 Original Start Date: 01/11/1966 Expiry Date: - Issue No: 103 Version Start Date: 02/11/2020 Version End Date: -
-	1960m S	Status: Historical Licence No: 6/33/13/*G/0011 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL, OUGHTON HEAD, HITCHIN Data Type: Point Name: Affinity Water Limited Easting: 515900 Northing: 229800	Annual Volume (m ³): 1659327 Max Daily Volume (m ³): 6546.24 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date: -



This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m

6

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 37 >](#)

ID	Location	Details	
-	1519m N	Status: Active Licence No: 6/33/13/*S/0100 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: DRAIN NEAR HOLWELL Data Type: Line Name: PARRISH Easting: 515772 Northing: 234196	Annual Volume (m ³): 1819 Max Daily Volume (m ³): 165 Original Application No: NPS/WR/027029 Original Start Date: 01/05/1996 Expiry Date: - Issue No: 101 Version Start Date: 21/08/2017 Version End Date: -
-	1520m N	Status: Historical Licence No: 6/33/13/*S/0100 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: DRAIN NEAR HOLWELL Data Type: Line Name: PARRISH Easting: 515780 Northing: 234200	Annual Volume (m ³): 3637 Max Daily Volume (m ³): 329 Original Application No: - Original Start Date: 01/05/1996 Expiry Date: - Issue No: 100 Version Start Date: 01/05/1996 Version End Date: -
-	1553m N	Status: Active Licence No: 6/33/13/*S/0100 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: DRAIN NEAR HOLWELL Data Type: Line Name: PARRISH Easting: 515580 Northing: 233912	Annual Volume (m ³): 1819 Max Daily Volume (m ³): 165 Original Application No: NPS/WR/027029 Original Start Date: 01/05/1996 Expiry Date: - Issue No: 101 Version Start Date: 21/08/2017 Version End Date: -
-	1560m N	Status: Historical Licence No: 6/33/13/*S/0100 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: DRAIN NEAR HOLWELL Data Type: Line Name: PARRISH Easting: 515560 Northing: 233910	Annual Volume (m ³): 3637 Max Daily Volume (m ³): 329 Original Application No: - Original Start Date: 01/05/1996 Expiry Date: - Issue No: 100 Version Start Date: 01/05/1996 Version End Date: -



ID	Location	Details	
-	1772m NE	Status: Historical Licence No: 6/33/13/*S/0051 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: WATERCOURSE AT HOLWELLBURY FARM - BETWEEN POINTS C AND D Data Type: Line Name: K Parrish and Son Easting: 516334 Northing: 233557	Annual Volume (m ³): 14547 Max Daily Volume (m ³): 1316 Original Application No: - Original Start Date: 16/10/1967 Expiry Date: - Issue No: 103 Version Start Date: 01/04/2018 Version End Date: -
-	1780m NE	Status: Historical Licence No: 6/33/13/*S/0051 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: WATERCOURSE AT HOLWELL Data Type: Line Name: K Parrish and Son Easting: 516330 Northing: 233570	Annual Volume (m ³): 41847 Max Daily Volume (m ³): 1316 Original Application No: - Original Start Date: 16/10/1967 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2011 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m

3

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 37 >](#)

ID	Location	Details	
-	1092m SW	Status: Historical Licence No: 6/33/13/*G/0024 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT WALNUT TREE FARM Data Type: Point Name: ROGERS Easting: 514700 Northing: 230700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/02/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1995 Version End Date: -



ID	Location	Details	
-	1930m S	Status: Active Licence No: 6/33/13/*G/0011 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL, OUGHTON HEAD, HITCHIN Data Type: Point Name: Affinity Water Limited Easting: 515904 Northing: 229832	Annual Volume (m ³): 1659323 Max Daily Volume (m ³): 6547 Original Application No: NPS/WR/033625 Original Start Date: 01/11/1966 Expiry Date: - Issue No: 103 Version Start Date: 02/11/2020 Version End Date: -
-	1960m S	Status: Historical Licence No: 6/33/13/*G/0011 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL, OUGHTON HEAD, HITCHIN Data Type: Point Name: Affinity Water Limited Easting: 515900 Northing: 229800	Annual Volume (m ³): 1659327 Max Daily Volume (m ³): 6546.24 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	1
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Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on [page 37 >](#)

ID	Location	Type	Description
1	457m S	3	Total catchment

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0
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Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

